

## CLAIMS

Please amend the claims as follows.

1. (Currently amended) A ~~two-directions~~ scanning method, comprising:  
moving a scan head along a first scanning direction to ~~proceed with a first scanning procedure using a first dpi, wherein a first~~ obtain a preview image is obtained from said using a first scanning resolution procedure;  
displaying the preview image;  
moving said scan head along a second scanning direction generally opposite to the first scanning direction to ~~proceed with a second scanning procedure in a second dpi, wherein a~~ second obtain a high resolution image is obtained from said using a second scanning resolution that is higher than the first scanning resolution procedure;  
receiving input corresponding to a selected portion of the preview image and a requested scanning resolution for a desired output image; and  
transforming operating on said second high resolution image to become a third generate said output image at the requested scanning resolution and according to a scope corresponding to said selected portion of the first preview image and a third dpi by using a program; and  
wherein said first scanning direction is generally opposite to said second scanning direction.
2. (Currently amended) The method according to claim 1, wherein said scan head moves in said second direction prior to the identification of said requested scanning resolution first dpi is lower than said third dpi.
3. (Currently amended) The method according to claim 1, wherein said output image is generated without further movement of said scan head second dpi is lower than said third dpi.
4. (Currently amended) The method according to claim 1, wherein said third second scanning resolution dpi is a highest available scanning resolution dpi of said scan head.

5. (Currently amended) The method according to claim 1, wherein said high resolution image is operated on ~~program transforms said second image to become said third image~~ by adjusting a graph image coordinate.

6. (Currently amended) The method according to claim 1, wherein said high resolution image is operated on ~~program transforms said second image to become said third image~~ by adjusting a scanning resolution dpi scale.

7. (Canceled)

8. (Currently amended) The method according to claim 1, wherein said requested scanning resolution is less than or equal to said second resolution ~~first scanning procedure is a preview procedure.~~

9. (Currently amended) A ~~two directions~~ scanning method, comprising:  
~~selecting a two directions scanning mode;~~  
moving a scan head along a first scanning direction to proceed with a first scanning procedure using a first scanning resolution dpi, wherein a first image is obtained from said first scanning procedure;

displaying said first image as a preview image;

moving said scan head along a second scanning direction to proceed with a second scanning procedure ~~in said~~ using a second scanning resolution dpi, wherein a second image is obtained from said second scanning procedure;

receiving input corresponding to a user-selected portion of said preview image and a user-selected third scanning resolution; and

~~selecting a program mode and transforming~~ operating on said second image to become generate a third image at said third scanning resolution and corresponding to said user-selected portion of said preview image, wherein said third image is generated without further movement of said scan head according to a first scope of said first image and a third dpi by using a program; and

wherein said first scanning direction is generally opposite to said second scanning direction.

10. (Currently amended) The method according to claim 9, wherein said scan head is moved along the second scanning direction prior to the identification of said user-selected portion first dpi is lower than said second dpi.

11. (Currently amended) The method according to claim 9, wherein said first scanning resolution dpi is lower than said third scanning resolution dpi.

12. (Currently amended) The method according to claim 9, wherein said third scanning resolution dpi is lower than said second scanning resolution dpi.

13. (Currently amended) The method according to claim 9, wherein said ~~third~~ second scanning resolution dpi is a highest available scanning resolution dpi of said scan head.

14. (Currently amended) The method according to claim 9, wherein ~~said program transforms said second image~~ is operated on to become said third image by adjusting a graph image coordinate.

15. (Currently amended) The method according to claim 9, wherein ~~said program transforms said second image~~ is operated on to become said third image by adjusting a scanning resolution dpi scale.

16. (Currently amended) The method according to claim 9, wherein a fourth scanning resolution dpi is set in said user interface identified after said third image is formed generated.

17. (Currently amended) The method according to claim 16, wherein said second image is ~~transformed to become~~ operated on to generate a fourth image according to said fourth scanning resolution, wherein said fourth image is generated without further moving said scan head dpi and a second scope of the first image by using said program.

18. (Currently amended) The method according to claim 9 wherein said second scanning procedure is performed prior to the identification of said user-selected portion 47, wherein said fourth image can be used to replace said first image.

19. (Currently amended) The method according to claim 9, wherein said ~~program~~ transforms said second image is operated on to become generate said fourth image by adjusting a scanning resolution dpi scale and a graph image coordinate.

20.- 23. (Cancelled)

24. (Currently amended) The method of ~~of~~ according to claim 1, ~~further comprising setting at least one of the first dpi, the second dpi, the third dpi, and the scope wherein the second resolution is preset. and wherein the selected portion of the first preview image and the requested scanning resolution are identified~~ in a user interface.

25. (Currently amended) The method of ~~of~~ according to claim 9, further comprising identifying a different portion of the preview image; and operating on said high resolution image to generate a second output image, wherein said second output image is generated without further movement of said scan head setting at least one of the first dpi, the second dpi, the third dpi, and the scope of the first image in a user interface.

26. (Cancelled)

27. (Currently amended) A system, comprising:  
means for moving a scan head along a first scanning direction to proceed with a first scanning procedure using a first scanning resolution dpi, wherein a first image is obtained from said first scanning procedure;

means for moving said scan head along a second scanning direction to proceed with a second scanning procedure in a second scanning resolution which is higher than said first

scanning resolution dpi, wherein a second image is obtained from said second scanning procedure;

means for selecting a portion of said first image;

means for selecting an output resolution; and

means for transforming operating on said second image to obtain a third image ~~according to a seep of the~~ corresponding to the selected portion of said first image and the selected output resolution, a third dpi by using a program; and wherein said first scanning direction is generally opposite to said second scanning direction.

28. (New) The system according to claim 27, wherein said scan head moves in said second scanning direction prior to the selection of said portion of said first image.

29. (New) The system according to claim 27, wherein said third image is generated without further movement of said scan head.

30. (New) The system according to claim 27, wherein the selected output resolution is less than or equal to said second resolution.

31. (New) A system, comprising:

a scan head configured to perform two or more scanning operations at different scanning resolutions, wherein a first scanning operation comprises scanning at a first resolution to obtain a preview image, and a second scanning operation comprises scanning at a second resolution higher than the first resolution to obtain a high resolution image;

a user interface configured to display said preview image, wherein said user interface comprises a component for selecting a portion of said preview image and a component for selecting an output resolution during the second scanning operation; and

a processor configured to operate on said high resolution image to generate an output image corresponding to said portion of the preview image and said output resolution.

32. (New) The system according to claim 31, wherein said scan head is configured to scan in a first direction during said first scanning operation, and wherein said scan head is further

configured to scan in a second direction opposite said first direction during said second scanning operation.

33. (New) The system according to claim 32, wherein said scan head is configured to perform said second scanning operation at the same time as the portion of said preview image is selected.

34. (New) The system according to claim 32, wherein said scan head is configured to begin said second scanning operation prior to a selection of the output resolution.

35. (New) The system according to claim 31, wherein said output image is generated without said scan head performing any further scanning operations.